

CLAIMS.

*sub 7A1*

1. A protein having one or more immunoreactive and/or antigenic determinants of *Eimeria lactate dehydrogenase* (LDH), said LDH having a relative monomeric molecular mass of about 37,000.
- sub 7A1*  
2. A protein according to claim 1 wherein the *Eimeria* species is *Eimeria acervulina*.
- sub 7A1*  
3. A protein according to claim 1 characterized in that it comprises at least part of the amino acid sequence shown in SEQ ID NO. 2 or a biologically functional equivalent thereof.
4. A nucleic acid sequence encoding a protein according to any one of claims 1 to 3.
5. A nucleic acid sequence according to claim 4 characterized in that the nucleic acid sequence contains at least part of the DNA sequence shown in SEQ ID NO. 1.
6. A recombinant nucleic acid molecule comprising a nucleic acid sequence according to claim 4 or 5 operatively linked to expression control sequences enabling expression of said nucleic acid sequence.
7. A recombinant vector comprising a nucleic acid sequence according to claim 4 or 5.
8. A recombinant vector according to claim 7 characterized in that the nucleic acid sequence is operatively linked to expression control sequences.

9. A host cell or organism transformed with a nucleic acid sequence according to claim 4 or 5 or a recombinant nucleic acid molecule according to claim 6 or a recombinant vector molecule according to claim 7 or 8.

10. A process for expressing the protein according to any one of claims 1 to 3 comprising culturing a host cell according to claim 9.

11. A vaccine for the protection of poultry against coccidiosis characterized in that it comprises a protein according to any one of claims 1 to 3, a recombinant nucleic acid molecule according to claim 6, a recombinant vector according to claim 7 or claim 8, or a host cell or organism according to claim 9 together with a pharmaceutically acceptable carrier.  
*sub A2*

12. A process for the preparation of a coccidiosis vaccine comprising the steps of culturing an infected host cell according to claim 9, collecting the recombinant vector and formulating said recombinant vector into a pharmaceutical preparation with immunizing activity.

13. A process for the preparation of a coccidiosis vaccine comprising formulating a protein according to any one of claims 1 to 3 or a protein prepared according to the process of claim 10 into a pharmaceutical preparation with immunizing activity.  
*sub A3*

14. An antibody or antiserum immuno-reactive with a protein according to any one of claims 1 to 3.

15. A method for the protection of poultry against coccidiosis comprising administering a vaccine according to claim 11 to the birds.  
*add B 4  
B 4*